

INSTALLATION AND OPERATING INSTRUCTIONS

002B051-00 Rev B
Cage Code 56183
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BACK PRESSURE VALVE MODIFICATION P/N 2237A182

1.0 GENERAL

The back pressure valve maintains a constant back pressure on the purge office within the check valve manifold. This consistent back pressure assures a controlled purge rate for effective drying and re-activating of the drying towers.

- 1.01 It has come to our attention that numerous Central Office and Remote Location air dryers have a very low demand. When the demand for dry air is low the compressor only runs occasionally. While the dryer is sitting idle, moist ambient air can be absorbed by the towers through the purge line.
- 1.02 To prevent this absorption during the dryers **OFF** cycle a new seat fitting can be placed into the back pressure valve. The new seat has an orifice in it to create a positive flow of dry air through the towers to keep them dry at all times. This modification will not reduce the output capacity of the air dryer.
- 1.03 This new bleed creates an internal leak in the dryer, therefore, if the dryer outlet is closed it is normal for the tank pressure gauge to continue to drop during the compressor **OFF** cycle.
- 1.04 The back pressure valve should be identified with a label (P/N 5620M43) or grease pencil after this modification is complete.

CAUTION: Do not install on dryers utilizing a diaphragm compressor.

2.0 DESCRIPTION

The new seat is a modified aluminum hex nut which fits into the body of the back pressure valve. (See Figure 1)

3.0 INSTALLATION

- 1. Remove alarm plug from air dryer alarm receptacle.
- 2. Turn the master switch to the **OFF** position.
- 3. Bleed air from the receiver tank by manually operating the safety relief valve on the tank.
- 4. Locate the back pressure valve, loosen lock screw and turn adjusting knob fully counterclockwise.
- 5. Unscrew and remove black plastic housing assembly, spring and compression cup.
- 6. Remove nylon retainer ring and diaphragm.
- 7. Unscrew aluminum seat (hex nut) and remove "O" ring.
- 8. Assemble "O" ring on new aluminum seat (hex nut) and reassemble valve by reversing above steps.
- 9. Mark the body of the valve with grease pencil or label.
- 10. Start dryer and adjust back pressure to (48 PSIG on all TX dryers, except the 6-PAK and 3-PAK which is 40 PSIG).
- 11. Re-install alarm plug.

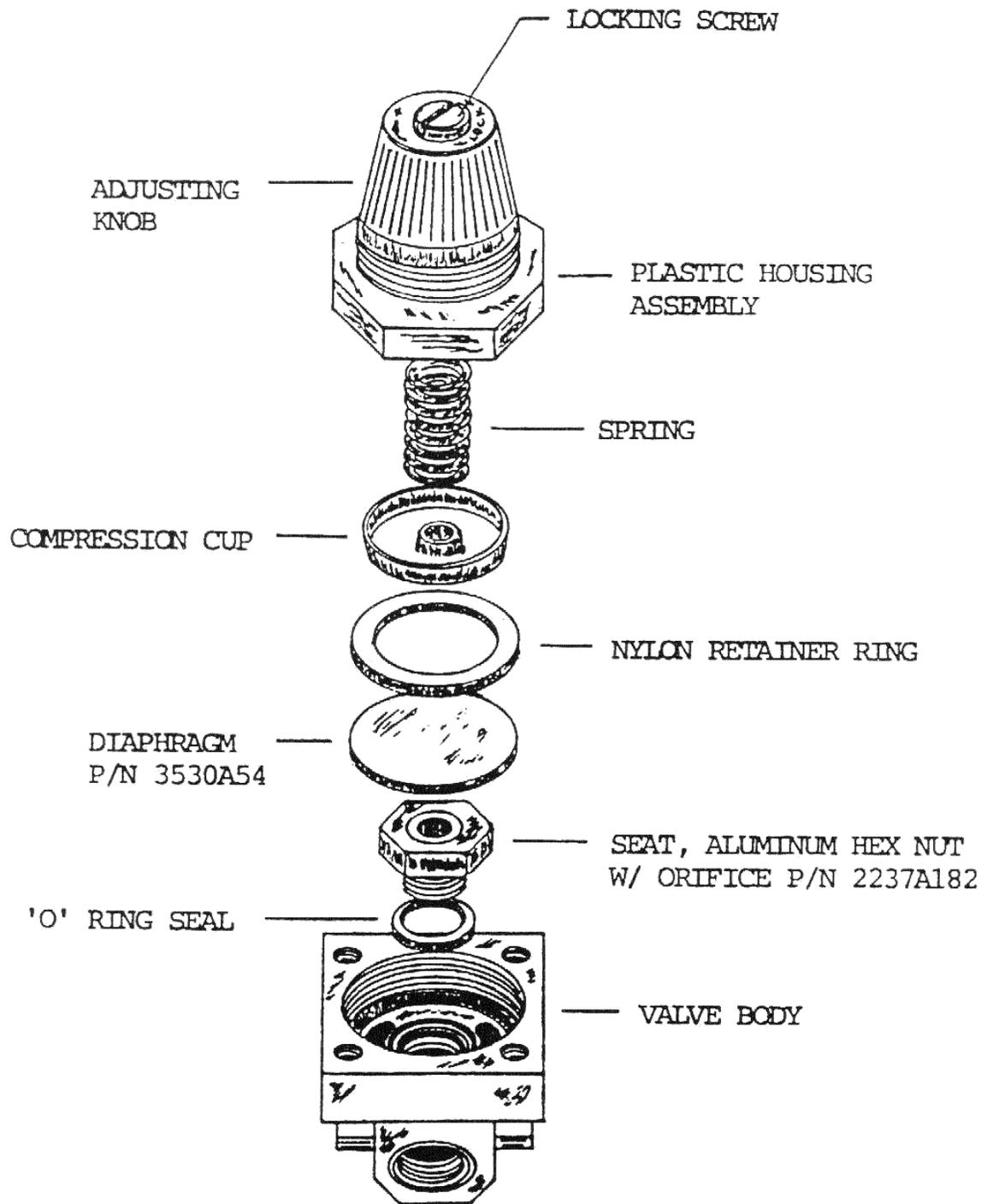


Figure 1